

What is claimed is:

1. A non-aqueous electrolyte battery provided with a positive electrode, a negative electrode, and a non-aqueous electrolyte using an organic solvent, wherein

a positive electrode material containing at least ferrite is used for said positive electrode, and a lithium alloy is used as a negative electrode material for said negative electrode.

2. The non-aqueous electrolyte battery according to claim 1, wherein

said ferrite is  $\text{CoFe}_2\text{O}_4$ .

3. The non-aqueous electrolyte battery according to claim 1, wherein

the negative electrode material for said negative electrode is a lithium alloy (Li-Si).

4. The non-aqueous electrolyte battery according to claim 1 is a secondary battery wherein discharge/charge is repeatedly performed.

5. A non-aqueous electrolyte battery provided with a positive electrode, a negative electrode, and a non-aqueous electrolyte using an organic electrolyte, wherein

a positive electrode material containing at least  $\text{FeS}_2$  is used for said positive electrode, and a lithium alloy is used as a negative electrode material for said negative electrode.

6. The non-aqueous electrolyte battery according to

claim 5, wherein

the negative electrode material for said negative electrode is a lithium alloy (Li-Si).

7. The non-aqueous electrolyte battery according to claim 5 is a secondary battery wherein discharge/charge is repeatedly performed.

8. A non-aqueous electrolyte battery provided with a positive electrode, a negative electrode, and a non-aqueous electrolyte using an organic solvent, wherein

a transition metal oxide (except for  $\text{LiCoO}_2$ ) having crystal structure of space group R3m is used as a positive electrode material for said positive electrode, and a negative electrode material containing lithium is used for said negative electrode.

9. The non-aqueous electrolyte battery according to claim 8, wherein

a lithium metal or a lithium alloy is used as the negative electrode material for said negative electrode.

10. The non-aqueous electrolyte battery according to claim 8, wherein

said transition metal oxide having the crystal structure of space group R3m is  $\text{NaFeO}_2$ .

11. The non-aqueous electrolyte battery according to claim 8, wherein

the negative electrode material for said negative

electrode is a lithium alloy (Li-Si).

12. The non-aqueous electrolyte battery according to claim 8 is a storage battery wherein discharge/charge is repeatedly performed.

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